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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOLMES, JUSTIN K

ART UNIT

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3655

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,957	Applicant(s) FUKUYAMA ET AL.	
	Examiner JUSTIN HOLMES	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57-60, 92 and 93 is/are rejected.
- 7) ☒ Claim(s) 61-91 and 94-99 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/28/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on April 16, 2004. It is noted, however, that applicant has not filed a certified copy of the Japanese Application No. 2004-122271 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on August 28, 2006 is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 57-60, 92 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,723,018 to Hayabuchi et al. in view of U.S. Patent No. 6,139,463 to Kasuya et al.

The Hayabuchi et al. patent teaches an automatic transmission having a planetary gear 72 that reduces a speed of an input rotation of an input shaft 15 and outputs a reduced speed rotation; at least two clutches c3, c1 that are capable of transmitting the reduced speed rotation that passes through the planetary gear 72; a planetary gear set 17 having at least two rotation elements s3, s4, wherein each rotation

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element can transmit the reduced speed rotation transmitted by the clutches; and an input transmitting clutch c5 that is capable of transmitting the input rotation into one of the at least two rotation elements s3, s4, an outer circumferential side linking path links the input shaft 15 and at least one of the rotation elements s3 via the input transmitting clutch c5 and passes through an outer circumferential side of at least one of the clutches c3; at least one of the clutches c1 and at least one of the two rotation elements s4 of the planetary gear set are linked via an inner circumferential side linking path that passes through an inner circumferential side of the input transmitting clutch c5; the at least two clutches are a first clutch c1 and a third clutch c3; the input transmitting clutch c5 is a fourth clutch; the at least two rotation elements of the planetary gear set has a first rotation element, a second rotation element, a third rotation element and a fourth rotation element; the first rotation element s3 is capable of transmitting the input rotation from the fourth clutch c5, the reduced speed rotation is capable of being transmitted from the third clutch c3, and the reduced speed rotation is capable of being fixed by a first retaining means b3; the second rotation element s4 is capable of transmitting the reduced speed rotation from the first clutch c1; the third rotation element c3,c4 is capable of transmitting the input rotation from a second clutch c2, and the input rotation is capable of being fixed by a second retaining means b4; and the fourth rotation element r3, r4 is linked to an output member 18. See Fig. 12.

However the Hayabuchi et al. patent lacks a teaching of the placement of the hydraulic servos for the clutches.

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The Kasuya et al. patent teaches a clutch c-1 has a hydraulic servo disposed on one axial side of a planetary gear in Fig. 14, and in Fig. 17, the clutch c-1 has the hydraulic servo on the opposite axial side of the planetary gear. See column 17 lines 27-48 and column 18 lines 16-28.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Hayabuchi et al. patent to include the hydraulic servos as taught in the Kasuya et al. patent and to position a hydraulic servo of the input transmitting clutch between the planetary gear set and the planetary gear in an axial direction; at least one hydraulic servo of the clutches is disposed on a side opposite, in the axial direction, from the planetary gear set as to the hydraulic servo of the input transmitting clutch as it would be applying a known device for a transmission, namely, a hydraulic servo for a clutch, to another known device, namely, a transmission that uses clutches, to yield a predictable result of positioning the servos at different places in the transmission case as it is shown in the Kasuya et al. patent that the servos can be freely moved as desired in Figs. 14 and 17 and it would have been obvious to try different positions of the servos in the transmission case.

Regarding claim 58, a support wall 10a is fixed to the case and disposed between the hydraulic servo of the inputting transmission clutch c1 and the planetary gear set in the axial direction, wherein the hydraulic oil is supplied to the hydraulic servo of the input transmitting clutch via an oil line on the support wall. See column 17, lines 60-67 and Fig. 15 of the Kasuya et al. patent.

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Regarding claim 59, the input transmitting clutch c5 is linked to at least one of the two rotational elements s4 of the planetary gear set 17 via at least one portion of the inner circumferential side linking path 74. See Fig. 12 of the Hayabuchi et al. patent.

Regarding claim 60, the planetary gear 72 has a fixed rotation element s2, an input rotation element r2 that is constantly linked to the input shaft 15, a reduced speed rotation element 73, the outer circumferential side linking path is a path that links the input shaft 15 via the input rotational element r2, (see Fig. 12 of the Hayabuchi et al. patent); and the hydraulic servo c-1 of the input transmitting clutch has a clutch drum 31 that is open in a direction of the planetary gear, wherein an outer circumferential side thereof is linked to the outer circumferential side linking path, and a piston member 32 that defines a hydraulic oil chamber in cooperation with the clutch drum 31 so as to press a friction plate based on hydraulic oil. See column 11, lines 23-60 and Fig. 4 of the Kasuya et al. patent that teaches the basic construction of a hydraulic servo for actuating a clutch.

Regarding claim 92, the planetary gear 72 and the planetary gear set 17 are arranged on the same axis and in the axial direction. See Fig. 12 of the Hayabuchi et al. patent.

Regarding claim 93, the output member 18 is an output shaft that transmits rotation on the same axis of the input shaft 15. See Fig. 12 of the Hayabuchi et al. patent.

Allowable Subject Matter

5. Claims 61-91 and 94-99 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 7,276,011 to Tabata et al. teaches a planetary transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN HOLMES whose telephone number is (571)272-3448. The examiner can normally be reached on 8:00am to 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUSTIN HOLMES/
Examiner, Art Unit 3655

/CHARLES A. MARMOR/
Supervisory Patent Examiner, Art Unit 3655